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BOCA RATON, FL 33487

EXAMINER

POLLACK, MELVIN H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/677,046 | Applicant(s) FACEMIRE ET AL. | |
| | Examiner MELVIN H. POLLACK | Art Unit 2145 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 21 February 2008 have been fully considered but they are not persuasive. The sole purpose of this new non-final is to correct a typographical error in which the explanation for generating a pathway navigation map was accidentally deleted (hence the unusual space between the last letter and the punctuation mark), and furthermore to map every claim so that the applicant need not read the cited art and be so confused as to the possible analysis.
2. The examiner interprets the claims as follows: when a web page is cached in a proxy server (heretofore known as the client, as distinct from an end user client), it modifies the URLs in the web pages based on some mapping. The examiner interprets "Pathway Navigation Map" broadly as based on associations for any of a variety of navigation purposes, including redirection, associations with nearby hosts in a DNS environment, and interpreting URLs with "query" components.
3. The examiner interprets the query component as the endpoint directive to focus on. Interpreting the term "annotating said served content" as changing part of the web page by adding or replacing content, the key to the endpoint directive is that it modify the behavior of a URL in a cached web page. A query expansion appends to the URL a parameter that affects clicking on the hyperlink such that the resulting page changes due to the proper values (col. 40, lines 30-55). Since hyperlink behavior" is itself a broad term, the fact that a page may be updatable due to the query component is sufficient to fulfill the basis.

Art Unit: 2145

4. In the alternative, URL swapping may also fit the definition as laid above. This is a replacement of terms rather than an addition, but it still fulfills the step of annotation. Here, the URL is replaced for the purpose of redirection, i.e. to a local server or to a particular location on the origin server (col. 39, line 55 – col. 40, line 30). This modifies hyperlink behavior, in the form of changing the address as to which the next content is retrieved.

5. In both cases, the primary behavior of the modification is to point the hyperlink to either a currently loaded page (page in cache, page in local server) or to a parent page (correct URL to point to origin server). Thus, claim 3 is also fulfilled.

6. Content Delivery Markup Language (CDML) is the mechanism by which the pointing of the hyperlinks occurred, and hence the purpose of the reference is to link CDML to redirection by changing the URL.

7. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the fact that Ben-Shaul and Maslov are interested in the same problem is an indicator that Maslov will improve Ben-Shaul in a way that is desired. One cannot presume that a person of ordinary skill in the art, having found a single solution to his problem, would not

Art Unit: 2145

seek out other solutions to the problem in the hope of combining elements with predictable results. At the very least, searching out improvements to Ben-Shaul would be obvious to try.

8. Therefore, the rejection is maintained. Applicant may file a notice of appeal if they so choose.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 3, 6, 8, 9, 11, 14, 16, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ben-Shaul et al. (6,976,090).

11. For claims 1 and 9, Ben-Shaul teaches a method and system (abstract) for processing off-line interactive content (col. 1, line 1 – col. 20, line 65; col. 66, lines 15-20) in a dynamic system with variable addressability (Figs. 1-2), the method comprising the steps of:

- a. serving content for caching (col. 22, lines 15-50) in a client device (Fig. 3, #30; regional edge server in client relationship with origin and local servers);
- b. generating a pathway navigation map (PNM) for said served content (col. 7, lines 20 – col. 11, line 35; col. 21, lines 10-50; col. 41, lines 30-40); and
- c. annotating said served content (col. 23, line 50 – col. 24, line 50 and col. 33, lines 60-65 in view of CDML as defined) with endpoint directives (col. 39, line 55 – col. 40,

Art Unit: 2145

line 55) for modifying hyperlink behavior referenced by said directives in said cached content (col. 21, lines 5-35).

12. Ben-Shaul does not actually use the term PNM, but it uses a functional equivalent based on the definition of PNM and its usage as currently claimed. In order to modify a page link for redirection or query service, the described maps associate the logical and physical connections between content locations and the servers they reside upon. In other words, the link modifier determines a pathway navigation using this mapping in order to figure out how to modify the link. Hence, the mapping is a pathway navigation map, as currently defined.

13. In the alternative, a definition for PNM is also the mapping that occurs in the DNS system, in that it clarifies not only the association between content and URL, but also defines which local server, if any, to access upon selection of a URL – that is, it defines the pathway to navigate in a map for web pages (col. 6, line 65 - col. 7, line 20; col. 50, lines 5-35; col. 52, lines 10-30).

14. For claims 3, 11, said annotating step comprises the step of annotating said content with at least one endpoint directive selected from the group consisting of take no action, remove all hyperlinks referenced by said directive, deactivate all hyperlinks referenced by said directive, point all hyperlinks referenced by said directive to a currently loaded page; and point all hyperlinks referenced by said directive to a parent page (col. 41, line 10 – col. 42, line 5).

15. For claims 6, 14, processing off-line submissions of content by navigating said PNM to reconcile on-line changes in hyperlinks in said content (col. 37, line 30 – col. 40, line 55).

16. For claims 8, 16, Ben-Shaul teaches a method and system (abstract) for processing off-line interactive content (col. 1, line 1 – col. 20, line 65; col. 66, lines 15-20) in a dynamic system with variable addressability (Figs. 1-2), the method comprising the steps of:

- a. receiving a request for an initial page of a Web application (Figs. 3-9);
- b. annotating said initial page (CDML; col. 23, line 50 – col. 24, line 50; col. 33, lines 60-65) with a set of hyperlinks referenced within said initial page (col. 39, line 55 – col. 42, line 5);
- c. retrieving additional pages associated with said set of hyperlinks and repeating said receiving, annotating and retrieving steps for all hyperlinks referenced within said additional pages (col. 20, line 65 – col. 35, line 10);
- d. generating a pathway navigation map for said hyperlinks (col. 7, lines 20 – col. 11, line 35; col. 21, lines 10-50; col. 41, lines 30-40; see above); and
- e. processing submitted content produced in an off-line interactive session with said initial page and said additional pages by reconciling hyperlinks in said submitted content by traversing said pathway navigation map (col. 21, lines 5-35).

15. For claim 17, Ben-Shaul teaches a system (abstract) for processing off-line interactive content (col. 1, line 1 – col. 20, line 65; col. 66, lines 15-20) in a dynamic system with variable addressability (Figs. 1-2) comprising:

- a. an off-line server process configured for coupling to an off-line client process across an occasionally connected network (Figs. 3-9);
- b. Web application content defined by a plurality of documents (col. 20, line 65 – col. 35, line 10); and

Art Unit: 2145

c. an interactive content processor configured to serve content for caching by said client process (col. 41, line 10 – col. 42, line 5), to generate a pathway navigation map (PNM) for said served content (col. 7, lines 20 – col. 11, line 35; col. 21, lines 10-50; col. 41, lines 30-40; see above), and to annotate said served content (CDML; col. 23, line 50 – col. 24, line 50; col. 33, lines 60-65) with endpoint directives for modifying hyperlink behavior (col. 39, line 55 – col. 42, line 5) referenced by said directives in said cached content (col. 21, lines 5-35).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2, 4, 5, 7, 10, 12, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Shaul as applied to claims 1, 3, 6, 9, 11 and 14 above, and further in view of Maslov (6,842,755).

18. For claims 2, 10, Ben-Shaul does not expressly disclose the best mode for developing a pathway navigation map. Maslov teaches a method and system (abstract) wherein said generating step comprises the steps of:

- a. forming a document tree having a plurality of nodes (col. 1, line 1 – col. 8, line 5; col. 10, lines 10-35);
- b. assigning each node of said tree to a document in said content accessible through a hyperlink referenced by a parent node (col. 8, line 5 – col. 10, line 10); and

c. disposing within each node a set of hyperlink references to child pages in said content and a reference to a pathway to a root node of said document tree (col. 8, line 5 – col. 10, line 10).

19. At the time the invention was made, one of ordinary skill in the art would have added Maslov's document trees to Ben-Shaul in order to fulfill the goal of a linked document retrieval system (Ben-Shaul, col. 5, lines 1-40) wherein documents may be retrieved even as the location of documents shifts (Maslov, col. 3, lines 25-40).

20. In the alternative, one of ordinary skill in the art at the time the invention was made would have recognized the Maslov system as obvious to try in a Ben-Shaul system, with predictable results.

21. For claims 4, 12, Maslov teaches said annotating step comprises the step of annotating said served content with at least one endpoint directive to invoke an action modifying all hyperlinks referenced by said directive when a specified depth within said content has been reached (col. 8, line 5 – col. 10, line 10).

22. For claims 5, 13, Maslov teaches that said annotating step comprises the step of annotating said served content with at least one endpoint directive to invoke an action modifying all hyperlinks referenced by said directive when a specified depth within said content has been reached (col. 8, line 5 – col. 10, line 10).

23. For claims 7, 15, Maslov teaches that said processing step further comprises the step of utilizing a specific element of said hyperlinks to reconcile ambiguities generated by changes in hyperlinks in said content (col. 8, line 5 – col. 10, line 10).

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They regard further teachings on hyperlink annotation and to PNMs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELVIN H. POLLACK whose telephone number is (571)272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melvin H Pollack/
Examiner, Art Unit 2145
09 June 2008